Abstract

A process for the preparation of polyisobutene containing at least 75 mol% of terminal vinylidene groups, in which isobutene or an isobutene-containing hydrocarbon mixture is polymerized in the liquid phase in the presence of a boron trifluoride complex catalyst having the composition

$$a(BF_3) : b(Co1) : c(Co2)$$

where Co1 is at least one tertiary alcohol, Co2 is at least one compound selected from water, primary alcohols, secondary alcohols, dialkyl ethers, alkanecarboxylic acids and phenols, the ratio c:b is from 0.9 to 1.8 and the ratio (b+c):a is from 0.9 to 3.0, is described.